Comparative studies on quality and flavor components of wine and spirit from different varieites of

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ABSTRACT

In this thesis, Milk pineapple (TN20), Local pineapple (Smooth Cayenne) and Gold Diamond Agricultural NO.17 pineapple (TN17) were used to make pineapple wine and pineapple spirit. Whole fruit of the pineapple from three varieties listed above were used and cooked with sugar in production of pineapple wine. The wines produced and were then further distilled to collect the liquors at three different alcohol contents, including three varieties of pineapple wine. Pineapple wine were further process by distilled and collected the liquor at 60 °, 50 °, 40 ° of pineapple spirits. The distilled liquor was then standardized by diluting alcohol to 40 ° using proper amount of water. The pH, total soluble solids, titratable acid, reducing sugar were studied during fermentation process. The volatile compounds from wines and spirits from different varieties of pineapple were measured and qualities were sensory evaluated by 30 appraisals from Department of Biotechnolgy, Dayeh University. The results showed brewed wine made from milk pineapple variety TN20 was accepted by most of the tasting members for better aroma and over all preference in sensory evaluation studies. The TN20 also has the lowest pH value (3.72), total titratable acid (0.18g/100mL). The alcohol content in final product of wines for three pineapple varieties are all about 7.3%. Based on the analysis from the volatile compounds, it was suggested that the variety TN20 has the richest of aroma components originally in pineapple raw materials and the final wine products. Sensory evaluation scores of pineapple wine from different varieties collected at different alcohol contents were also studied. For all three pineapple varieties, the higher percent of alcohol collect from distilled liquor, the better sensory scores will be when they standardized into 40 °。

Keywords : Ananas comosus【L.】Merr、spirit、wine、volatile compound、quality

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